CLAIMS

WHAT IS CLAIMED IS:

1   1. A system for optimizing network resources for
2   conference calls, comprising:
3   endpoints that request the conference calls;
4   multi-point control units for supporting
5   conference calls between three or more
6   endpoints;
7   a resource scheduler for receiving the
8   conference call requests; and
9   a gatekeeper communicatively coupled to the
10   resource scheduler for managing the network
11   resources;

1   2. The system of claim 1, wherein the gatekeeper
2   includes a connectivity policy module for maintaining
3   network policies.

1   3. The system of claim 2, wherein the network policies
2   include network bandwidth management policies.

1   4. The system of claim 2, wherein the gatekeeper manages
2   the network resources based on the conference call
3   requests and the network policies.

1   5. The system of claim 4, wherein the gatekeeper
2   includes a bandwidth module communicatively coupled
3   to the connectivity policy module for determining
4   network bandwidth availability for the conference
5   call requests.

6. The system of claim 4, further comprising a network management system communicatively coupled to the gatekeeper to determine if dynamic cascading of the multi-point control units is required for resource optimization.

7. The system of claim 6, wherein the gatekeeper further includes a cascade optimization module for determining an optimum cascade configuration for the multi-point control units.

8. The system of claim 7, wherein if the network management system determines that dynamic cascading of the multi-point control units is required for resource optimization, then the gatekeeper determines the optimum cascade configuration for the multi-point control units.

9. A method for optimizing network resources for a conference call requested by endpoints, comprising the steps of:

    receiving the conference call request by a resource scheduler;

    accessing a connectivity policy module;

    determining if sufficient network resources are available to connect the conference call; and

    supporting the conference call between three or more endpoints with multi-point control units;

10. The method of claim 9, wherein the connectivity policy module maintains network policies.

1   11. The method of claim 10, wherein the connectivity
2   policy module accesses a bandwidth module for
3   determining available network resources.

1   12. The method of claim 11, wherein if sufficient network
2   resources are available to connect the conference
3   call, the resource scheduler schedules the conference
4   call.

1   13. The method of claim 12, wherein a determination is
2   made whether network resources are optimized by a
3   dynamic cascading of the multi-point control units.

1   14. The method of claim 13, wherein if dynamic cascading
2   of the multi-point control units is required for
3   resource optimization, then an optimum cascade
4   configuration for the multi-point control units is
5   determined.

15. A system for optimization of network resources for a
conference call, comprising:

    means for requesting the conference call;

    means for receiving the conference call request;

    means for accessing a connectivity policy
       module, the connectivity policy module having
       connectivity policies;

    means for determining available network
       resources;

    means for determining if sufficient network
       resources are available to connect the
       conference call based on connectivity
       policies, the conference call request, and the
       available network resources;

    means for determining whether network resources
       are optimized by a dynamic cascading of the
       multi-point control units; and

    means for determining an optimum cascade
       configuration of the multi-point control
       units.

16. A system for optimizing network resources for
conference calls, comprising:

    a plurality of local area networks;

    a plurality of endpoints coupled to the local
area networks for requesting conference calls;

    a plurality of multi-point control units coupled
to the local area networks for supporting
conference calls between three or more
endpoints;

    a resource scheduler coupled to the local area
networks for scheduling the conference calls;

    a gatekeeper coupled to the resource scheduler
for determining an optimum cascade
configuration for the multi-point control
units; and

    a network management system coupled to the
gatekeeper for determining whether dynamic
cascading of the multi-point control units is
required for resource optimization.

17. The system of claim 16, wherein each of the plurality
of endpoints is a videoconference-enabled device.